

One-page summary: Reusable cup trial design, findings and recommendations

Background

Despite efforts, significant single-use cup waste persists on campus. A comprehensive reusable cup scheme is required to tackle behavioral barriers among students and staff.

Intervention design

As part of the EPA-IUA Campus Living Labs Sustainability Project, two interventions were developed and trialled at University College Dublin (UCD). The first intervention aimed to increase reusable cup uptake by offering discounted prices through an email campaign providing information on their benefits and campus purchasing locations. The second intervention focused on promoting the habit of using reusable cups through the eCups scheme. The scheme, utilises a mobile app to track waste reduction and offer rewards based on cup usage.

Trial design and implementation

Discount effectiveness on reusable cup purchase was evaluated via a randomised controlled trial (RCT). Staff and students received randomised email offers with varying discount levels for their first eCup purchase. Discount redemption required presenting a QR code at one of nine participating campus outlets.

To assess the effectiveness of the eCups scheme in promoting reusable cup use, data was collected through the eCups mobile app and a follow-up survey. The survey aimed to understand eCup users' experience, including usage patterns, motivations, challenges, and suggestions for improvement. Non-participants were also surveyed to understand their reasons for not participating. Additionally, a comparative analysis of alternative reusable cup schemes was conducted across four universities.

Findings

Our analysis yields several key learnings:

- Discounts were ineffective in promoting reusable cup take-up, as early adopters of the eCups scheme were primarily motivated by pro-environmental attitudes rather than economic factors.
- The eCups scheme and mobile app did not provide additional motivation for users to use their reusable cups more frequently compared to generic reusable cups.
- The current eCups scheme did not fully address challenges related to inconvenience and forgetfulness, which may be better resolved through a deposit and return scheme.

To reduce single-use cups on campus, a multifaceted approach is recommended. Universities should adopt a tailored strategy that leverages different motivators for various user groups. This strategy should include: (1) selling reusable cups to individuals who are likely to use them regularly, (2) implementing a deposit and return scheme with tracking and incentives or penalties through a mobile app, and (3) implementing a campus-wide ban on single-use cups.